



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,201	06/23/2006	Sophia Ebert	291966US0PCT	9150
22850	7590	01/07/2010		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.				
1940 DUKE STREET				
ALEXANDRIA, VA 22314				
EXAMINER				
OLADAPO, TAIWO				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
01/07/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

Office Action Summary

Application No.

10/584,201

Applicant(s)

EBERT ET AL.

Examiner

TAIWO OLADAPO

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment dated 12/23/2009 has been considered and entered for the record. The amendment does not overcome the previous rejections which are maintained.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/2009 has been entered.

Claim Rejections - 35 USC § 103

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3, 5 – 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauls et al. (US 6,274,381) in view of Oppenlander et al. (US 6,533,830)

6. In regards to claims 1, 3, 10 – 11, Pauls teaches a method of invisibly tagging liquid petroleum products such as fuels, heating oils, lubricating oils etc, with invisible dyes (title, abstract). Pauls teaches the dyes are stable when combined with additives such as deposit control agents (dispersants) and detergents according to the claimed limitations (column 4 lines 52 – 54). The dyes are anthraquinone having, i.e., a structure of formula (I) which is similar to the compounds of formula (I) and (II) in the claim (column 5 lines 1 – 17). Pauls teaches the compound having NHR^1 and NHR^2 groups wherein R^1 and R^2 can be C_1 to C_{12} alkyl. This meets the limitations of the structure of formula (II) in the claim when X is hydrogen, m is 0, and Z^1 and Z^2 are hydrogen, and R^1 and R^2 are C_1 to C_{20} alkyl in the compound of formula (II) according to the claim. The compound of Pauls also meets the limitations of formula (I) in the claims which is a genus to the compound of formula (II). Pauls teaches the dyes can be used in the form of solutions which are concentrates to facilitate blending and distribution in the petroleum product such as without limitations, xylene, toluene, petroleum fractions etc (column 7 lines 18 – 25). Pauls does not particularly recite the carrier oils of claim 1.

Oppenlander teaches polyalkene alcohol polyalkoxylates are suitable as carrier oils for additives such as for detergents and dispersants in fuels and lubricant compositions similar to

Pauls (abstract). Oppenlander teaches the carrier oil can be present at from 0.1 up to 80% of the concentrate which leaves a remainder of from 20% up to 99.9% of other additives such as detergents and dispersants in the concentrate which overlaps the claimed ranges (column 4 lines 26 – 34).

In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

It would have been obvious for one of ordinary skill in the art at the time of the invention to have used the carrier oil of Oppenlander for preparing additive concentrates according to the invention of Pauls, as Oppenlander teaches the carrier oils are suitable for use in fuel and lubricant compositions.

7. In regards to claims 5, 13, Pauls and Oppenlander combined teach the concentrate comprising liquid petroleum based heating and lubricating oils which are mineral oils, the additives and overlapping amounts meeting the limitation of the claims; thus providing for the method of preparing an additive concentrate comprising mineral oils, detergents and anthraquinone additives which intrinsically performs the intended functions of the limitation of claim 13.

8. In regards to claims 6, 7, Pauls and Oppenlander teach the concentrate having polyalkene alcohol polyalkoxylates as previously recited (abstract). The polyalkene alcohol polyalkoxylates are long chain alkoxyated alcohols of a formula (I) having a R group of C₂ to C₃₀ alkenes meeting the limitations of claims 6 and 7 (column 1 lines 55 – 65).

9. In regards to claim 8, Pauls and Oppenlander combined teach the composition wherein the carrier oil of formula (I) has R group derived from polyisobutyl radical which meets the limitation of the claim (Oppenlander, column 2 line 19).
10. In regards to claim 9, Pauls and Oppenlander combined teach the composition wherein the detergents can be polyisobutenamines, poly(iso)buteneamines, hydroxyl-containing polyisobutenamines, polyetheramines and polyisobutene Mannich bases (Oppenlander, column 3 lines 18 – 67).

Response to Arguments

11. Applicant's arguments have been fully considered but they are not persuasive.
12. The applicants argue that Pauls does not teach solutions comprising further additives are present with the markers, nor does Oppenlander the claimed markers are present in the concentrate, but that the compositions are different. However, the argument is not persuasive as Oppenlander teaches lubricant and fuel compositions can comprise carrier oils used for preparing additive concentrates that can be used in any lubricant or fuel composition. Since Pauls does not teach against a composition comprising additives, the additives of Oppenlander would be obvious to one of ordinary skill in the art to be used in compositions lubricant/fuel compositions such as Pauls.
13. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

14. The applicants have not addressed the issues raised in the office action dated 04/01/2009 with respect to the scope of the inventive examples used to assert unexpected results.

15. The applicants assert there are superior unexpected results achieved by the claimed composition. However, the inventive examples used to obtain the alleged unexpected results are not commensurate in scope with the claims. The inventive examples comprise specific additives at specific amounts while the concentration of additives claimed are broader, and particularly the anthraquinone markers of the claimed invention are not limited to any particular concentration. Furthermore, the results of the experiments are not persuasive. The inventive examples 1 to 9 are compared to detergents to determine storage stability while the comparative examples are compared to carrier oils in Tables 2 and 3. Applicants therefore have not demonstrated unexpected results sufficient to rebut the case of obviousness.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAIWO OLADAPO whose telephone number is (571)270-3723. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TO

/Ellen M McAvoy/
Primary Examiner, Art Unit 1797